North Dakota Department of Transportation
Electronic Crash Reporting System (ECRS) - Phase II
Project Business Case

Submitted 06/24/2004, by Mike Becker

Business Case

Phase II of the ECRS project expands the capability of the TraCS software in two areas;

1) The ability to print two additional forms - the Re-examination report and the Driver Information Exchange - which will pull data that has already been entered by the officer on the crash report.

2) Development of a crash location tool that will be modeled after the Iowa location tool which uses base maps to allow the officer to locate the crash site on a base map and populate the crash report.

Drivers License & Traffic Safety is currently accepting grant proposals from law enforcement agencies for in-car equipment (barcode scanners, printers and MDC's), to be used for the TraCS implementation.

Phase II project expansion was the recommendation of the 411 Grant Fund working group who determined the expenditures based on the remaining 411 grant dollars that expire in October 2004.

Cost Benefit Analysis

The benefit of automating forms will eliminate the officer from having to fill out additional paperwork since all the necessary data will have been collected with the crash report. The second form is a courtesy for the drivers.

The location tool and adding the base maps to TraCS will greatly increase the accuracy of the crash locations. Crash location has been a long standing issue with the NDDOT engineering divisions and considerable time and effort is expended reviewing and making adjustments to locations based on the narrative and the diagram. The base maps will eliminate the need for the officer to refer to node books which are frequently outdated. Initial research estimates that approximately 80 to 100 hours will be needed to modify the Iowa model to North Dakota's map.

From the initiation of the ECRS project, the October 2004 goal was to receive 90% of the crash reports electronically in order to eliminate the need for employing temporary staff to key the data into the CRS application. Driver's License & Traffic Safety currently have 1 full-time and 2 part-time temporary employees whose responsibility it is to review the paper copies for accuracy and enter the data. The third step is scanning the crash reports into the Imaging system. Transmitting the crash reports electronically will reduce

the temporary salary dollars needed to key the data and eliminate the need for imaging the paper copies since all data including the narrative and crash diagram will be retrievable via the CRS PowerBuilder application.

As of July 1, 2004, DL&TS has received proposals from 12 agencies for hardware purchases and an additional 13 have expressed interest. The 25 agencies represent approximately 69% of the reportable crashes statewide so the original 90% goal should be obtainable. The ECRS Project should supply the tools necessary to simplify the process for law enforcement and therefore, gain buy-in.

Risk Analysis

There is no risk associated with the addition of the forms. Risks associated with the location tool are that NDDOT needs to insure that the base maps are kept current, accurate, and are redistributed when updates occur.

Risks associated with the equipment purchases are being able to insure that 411 Federal dollars are used to purchase hardware, crash data will be submitted electronically, and agencies have the technical support to maintain the hardware.